GreenPower News

An update from Western's Renewable Resources Program covering green power, reports and studies and funding.

Welcome to the *Green Power News Update.* This is a summary of the stories that ran during **October, 2015**. New stories are added throughout the month to make sure you always know what is happening in our fast-changing industry. Check back often to see what's new!

Individuals or agencies sending press releases quoted here are entirely responsible for the accuracy of their information.

In this issue:

Green Power

EPA Releases Updated Top Green Power Partner Rankings

Today, the U.S. Environmental Protection Agency's Green Power Partnership released updated quarterly rankings of its top Green Power Partners that are choosing to use electricity from clean, renewable sources. The Top Partner Rankings highlight the annual green power use of leading Green Power Partners within the United States and across individual sectors.

Major additions and movers

- Mars, Incorporated: New to the EPA Green Power Partnership, Mars, Incorporated debuts at No. 6 on the National Top 100 list. Mars is using more than 801 million kilowatt-hours (kWh) of green power each year, which is equal to 92 percent of its electricity use.
- City of Dallas, TX: A Green Power Partner since 2007, the City of Dallas, TX climbs to the top spot in the Top 30 Local Government list after nearly doubling its green power commitment. The City is now using more than 715 million kWh of green power annually.
- Equinix, Inc.: Also new to the Partnership, Equinix, Inc. debuts at No. 18 on the National Top 100 list and No. 6 on the Top 30 Tech & Telecom list. Equinix is using 300 million kWh of green power each year, enough to meet 25 percent of its electricity use.

Other notable additions and ranking changes

- National Top 100: Keurig Green Mountain, Inc. (No. 21), University of Maryland (No. 80), U.S. Department of Agriculture (No. 92), Coca-Cola Refreshments (No. 97)
- Top 30 Retail: Community Food Co-op (No. 30)
- Top 30 College & University: University of Maryland (No. 12)
- Fortune 500® Partners: American Airlines Group / Texas (No. 43)
- Top 30 Local Government: Montgomery County Clean Energy Buyers Group (No. 4), City of Denton, TX (No. 16)

Source: EPA Green Power Partnership, 10/26/15

WINDExchange Publishes Wind Integration Slideshow

As part of a stakeholder outreach effort, WINDExchange published a new wind energy integration slideshow.

This slideshow provides information about integrating wind energy into the electricity grid, including:

- Examples of wind energy contributing significant power to energy portfolios around the world
- States leading the market in wind energy production
- How wind energy can increase system reliability during severe weather events
- How improved wind forecasting tools and wind technology help grid integration.

The other slideshows in the series explore wind energy benefits and wind energy impacts.

Source: DOE EERE WindExchange Newsletter, 10/19/15

Silicon Valley Power Recieves EPA Green Power Leadership Award

National Awards Honor Leading Green Power Suppliers

Silicon Valley Power is excited to announce that it has received a 2015 Green Power Leadership Award from the U.S. Environmental Protection Agency (EPA). EPA's annual Green Power Leadership Awards recognize the country's leading green power suppliers for their commitment and contribution to helping advance the nation's voluntary green power market. EPA presented Silicon Valley Power with the Green Power Supplier of the Year award at the 2015 Renewable Energy Markets Conference in Arlington, Virginia on October 19, 2015.

"EPA is pleased to recognize Silicon Valley Power with a Green Power Supplier of the Year Award for its leadership in expanding the nation's renewable energy industry," said EPA Administrator Gina McCarthy. "Through its development of new renewable energy capacity, Silicon Valley Power is helping to address climate change and put our country on a path to a future powered by renewable resources."

Source: Silicon Valley Power, 10/20/15

Download webinar on emissions measurement from Green Power Partnership

Presentations from the Green Power Partnership webinar, "Measuring Emissions from Purchased Electricity: A Primer on GHG Protocol's New Scope 2 Guidance," presented by EPA, WRI, and WSP, are now available online. The webinar focused on accounting for GHG emissions from purchased electricity under the recently updated Greenhouse Gas (GHG) Protocol's Scope 2 Guidance, and we hope the links provided below are helpful.

The webinar recordingis also available (this link is good for up to a year). After selecting the link, you should be able to download and view the recording. You'll need Windows Media Player or a similar media player in order to view the webinar.

Learn more about the recently released guidance.

Source: Green Power Partnership, 10/8/15

The Green Power Network for September 2015

This update summarizes recent green power marketing activity, including news and information on competitive green power marketing, utility green pricing programs, renewable energy certificates, green power purchasing, and related market activity. Additional information on green power markets and products, as well as links to the companies mentioned below, can be found on the U.S. Department of Energy's Green Power Network website.

Announcement

- Emerging Trends in Utility Green Power Products

News

- U.S. Higher Education Institutions Move Forward with Renewable Energy
- Nine Large Companies Take the 100% Renewable Energy Pledge
- GMP and Yeloha Launch Solar Sharing Program in Vermont
- Equinix to Power California Data Centers with 100% Renewable Energy

- Innovative Community Solar Array Program Launches in Vermont
- Colorado Energy Office Awards $1.2 Million for Low Income Community Solar Projects
- PSC Approves Alabama Power's Renewable Energy Proposal
- CPS Energy and PowerFin Launch Rooftop Solar Program in San Antonio
- U.S. Cities Go 100% Renewable

Renewable Energy RFPs

- Duke Energy Carolinas and Duke Energy Progress
- Minnesota Power
- General Service Administration Capital Solar Challenge

Source: Green Power Network, 9/30/15

Website offers educational resources for regional wind development

The Four Corners states, Nevada, and Wyoming are home to abundant wind resources. The following links provide information on Market, Cost and Integration Reports; Assessments and Road Maps; Wind Resource Maps; Resource Websites; and Fact Sheets. Information is listed by category then date of publication. The 4CWRC has highlighted noteworthy reports with bold titles.

Source: Four Corners Wind Resource Center, 9/30/15

Download presentation on community solar

Clean Energy State Alliance has posted slides and a recording of the webinar, *Federal Residential Tax Credit Eligibility for Community-Shared Solar Panel Owners*.

This webinar was a presentation of CESA. For more information, please visit the website.

Source: Clean Energy State Alliance, 9/22/15

The CESA Brief

The CESA Brief e-newsletter provides periodic updates about the programs and accomplishments of the Clean Energy States Alliance (CESA) and its member organizations.

In this issue:

- IRS Rules Favorably on Owner's Eligibility for Federal Tax Credit for a Community-Shared Solar Project
- States Lead Clean Energy Development through Innovative Programs According to New Report
- Building a Regional Roadmap for Offshore Wind: Northeast States Receive DOE Award
- A New Mexico Homeowner's Guide to Solar Financing: Leases, Loans and PPAs
- CESA Recognizes Peter West as a "Clean Energy Champion"

Source: Clean Energy States Alliance, 10/1/15

Visit U.S. DOE EERE Green Power Network for more information.

Reports and Studies

New Report: "Tectonic Shift" in U.S. Energy Use--Renewables Surging; Coal, Oil, and Electricity Down

I recently heard the CEO of the nation's largest utility tell a roomful of mostly conservative Midwest business and government leaders, gathered at the University of Missouri, that she was optimistic about prospects for cutting the nation's carbon pollution and meeting the goals of the nation's new Clean Power Plan to limit power plant emissions. Duke Energy's Lynn Good could -- and did-- base her optimism in part on a well-documented record of U.S. achievement, which is summarized in today's new NRDC report describing "A Tectonic Shift in America's Energy Landscape."

Source: NRDC Switchboard, 10/8/15

NREL Assesses Costs of Adding New Generation to Existing Power Systems

NREL was commissioned by the Wind Program of the U.S. Department of Energy to investigate three integration cost-related questions: (1) How does the addition of new generation affect a power system's operating costs? (2) How do changes in the generation mix and system operating parameters and procedures affect costs? and (3) How do increases in VG impact the accuracy of natural gas orders?

The study, designed and executed in collaboration with a group of industry experts, examined how production costs vary with the addition of new baseload generation, increases in the amount of VG, and changes in generation mix, gas prices, and self-scheduling practices. Four aspects of production costs were investigated: generator cycling costs (i.e., start-up, shutdown, and ramping-related costs), non-cycling variable operations and maintenance (VO&M) costs, reserves provisioning costs, and fuel costs.

Source: National Renewable Energy Laboratory, 9/29/15

Nonprofit raises energy awareness, understanding

The mission of the NEED Project is to promote an energy conscious and educated society by designing objective, multi-sided energy education programs. Energy companies, government agencies and organizations work with NEED to create timely and balanced curriculum materials that focus on easy-to-implement program modules and professional development opportunities for teachers. To deliver these programs, NEED builds networks of students, educators, business, government and community leaders.

Source: The NEED Project, 10/2/15

How extending the investment tax credit would affect US solar build

APPLIED RESEARCH – SOLAR ENERGY INDUSTRIES ASSOCIATION (SEIA)

Under current policy, the US can expect 73GW of solar PV online by year-end 2022. A pending reduction of the 30% investment tax credit (ITC) in 2017 will reduce build rates from an average of 8GW/year from 2014-16 to 6GW/year from 2017-22. A five-year extension of the 30% ITC would add over 22GW to the US solar PV install base, boosting average build rates to 10GW/year from 2017-22.

Source: Solar Energy Industries Association via Bloomberg, 9/15/15

Two DOE Reports Analyze U.S. Wind Energy Growth

The U.S. Department of Energy recently released two reports that provide a detailed analysis of the wind energy industry, technology and performance trends and costs: the 2014 Wind Technologies Market Report produced by Lawrence Berkeley National Laboratory (LBNL) and the 2014 Distributed Wind Market Report produced by Pacific Northwest National Laboratory.

The *2014 Wind Technologies Market Report* noted that U.S. wind energy prices are at an all-time low and are competitive with wholesale power prices and traditional power sources across many areas of the United States. A new trend identified by the report shows utility-scale turbines with larger rotors designed for lower wind speeds have been increasingly deployed across the country in 2014.

Source: DOE Office of Energy Efficiency and Renewable Energy, 9/15/15

Price of Solar Energy in the United States Has Fallen to 5¢/kWh on Average

Berkeley Lab study reveals 70% decline in PPA prices since 2009

Solar energy pricing is at an all-time low, according to a new report released by Lawrence Berkeley National Laboratory (Berkeley Lab). Driven by lower installed costs, improved project performance, and a race to build projects ahead of a reduction in a key federal incentive, utility-scale solar project developers have been negotiating power sales agreements with utilities at prices averaging just 5¢/kWh. These prices reflect receipt of the 30% federal investment tax credit, which is scheduled to decline to 10% after 2016, and would be higher if not for that incentive. By comparison, average wholesale electricity prices across the United States ranged from 3 to 6 cents/kWh in 2014, depending on the region.

Source: Lawrence Berkeley Laboratory, 9/30/15

Energy Literacy: Essential Principles and Fundamental Concepts for Energy Education

What is Energy Literacy?

Energy Literacy is an understanding of the nature and role of energy in the world and daily lives accompanied by the ability to apply this understanding to answer questions and solve problems.

An energy-literate person:

- Can trace energy flows and think in terms of energy systems.
- Knows how much energy they use, for what purpose, and where the energy comes from.
- Can assess the credibility of information about energy.
- Can communicate about energy and energy use in meaningful ways.
- Is able to make informed energy use decisions based on an understanding of impacts and consequences.

Source: DOE Office of Energy Efficiency and Renewable Energy, 9/22/15

Find more publications and webinars.

Funding

Renewable Energy Systems and Energy Efficiency Improvements Program

Reference: RDBCP-REAP-RES-EEI-2016

REAP Applications are accepted year-round. For applicants requesting grants of $20,000 or less, that wish to have their application compete for the "Grants of $20,000 or less set aside", complete applications must be received no later than 4:30pm local time on: November 2, 2015, or May 2, 2016. For applicants requesting grant funds of over $20,000 or funding for a combination grant and guaranteed loan, complete applications must be recevied no later than 4:30pm local time on May 2, 2016.

Source: Department of Agriculture, 10/27/15

Renewable Energy Systems and Energy Efficiency Improvements Program

Applications Due: November 2, 2015

Department of Agriculture

The program provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses to purchase or install renewable energy systems or make energy efficiency improvements. The loan guarantee terms are:

- $5,000 minimum loan amount
- $25 million maximum loan amount
- Up to 85% loan guarantee
- Rates and terms negotiated with the lender and subject to USDA approval
- Maximum term of 30 years for real estate
- Maximum term of 15 years for machinery and equipment
- Maximum term of 7 years for capital loans
- Maximum term of 30 years for combined real estate and equipment loans

See the FOA.

Estimated Total Program Funding: $35.4 million

Source: Van Ness Feldman, 10/22/15

Energy Department Modifies Indian Energy Funding Opportunity

DOE Office of Indian Energy Deployment of Clean Energy and Energy Efficiency on Indian Lands (DE-FOA-0001390) Funding Opportunity Modified

Applications due: Dec. 10, 2015
Eligible entities: Indian Tribes (including Alaska Native regional corporations and village corporations) and Tribal Energy Resource Development Organizations

Up to $6 million in funding is available to accelerate clean energy development on tribal lands.

Modification 0001 Changes: All modifications are highlighted in yellow in the body of the FOA.

Modification 0001 included, clarifying the types of eligible hydropower systems, clarifying “community-scale project,” adding “Alaska regional development organization” as an example of an “Inter-Tribal Organization,”

updating summary slide requirements, adding a requirement to include an explanation and rationale as to how the proposed project meets the community-scale requirement, specifically addressing the "substantial" element, defining kBtu, and clarifying the description of Table 2, and adding Appendix E, Summary Slide Template.

The deadline to apply is Dec. 10, 2015. For more information, download the Modification 0001 under FOA Documents.

Check out Frequently Asked Questions (FAQs) for responses to questions. Send FOA-related questions to the DOE Tribal Energy Program.

Informational Webinar Materials Available

The DOE Office of Indian Energy hosted an information webinar on the FOA on Sept. 16, 2015. In addition to describing the funding opportunity in detail, the presenters discussed who is eligible to apply, what the application needs to include, cost share and other requirements, how to ask questions, and how applications will be selected for funding.

Source: DOE Tribal Energy Program, 10/2/15

Find more funding sources.